

Title (en)

USE IN GASOLINE DIRECT INJECTION ENGINES

Title (de)

VERWENDUNG IN BENZINDIREKTEINSPRITZMOTOREN

Title (fr)

UTILISATION DANS DES MOTEURS À ESSENCE À INJECTION DIRECTE

Publication

EP 2990469 A1 20160302 (EN)

Application

EP 15182399 A 20150825

Priority

US 201462042386 P 20140827

Abstract (en)

Use in a turbo-charged gasoline direct injection (GDI) engine of a lubricant composition to reduce engine wear. The lubricant composition includes a major amount of oil of lubricating viscosity, and a minor amount of at least one highly grafted, multi-functional olefin copolymer made by reacting an acylating agent with an olefin copolymer having a number average molecular weight greater than about 1,000 in the presence of a free radical initiator to provide an acylated olefin copolymer having a degree of grafting (DOG) of the acylating agent on the olefin copolymer of at least 0.5 wt.%, and reacting the acylated olefin copolymer with an amine to provide a highly grafted, multi-functional olefin copolymer. The highly grafted, multi-functional olefin copolymer is effective to reduce engine wear in the turbo-charged GDI engine to below engine wear provided by a lubricant composition devoid of the highly grafted, multi-functional olefin copolymer.

IPC 8 full level

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